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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,678	09/14/2001	Gregory T. Galazin	70774-1246	7933

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EXAMINER

CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,678

Applicant(s)

GALAZIN, GREGORY T.

Examiner

Eric D Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed 9/21/01 to the claims is incomplete (changes to claims 1-6 and 30-33 are not shown; apparently, some pages of Appendix B are missing from the Office file, as there is no "page 1 of 5" in the Office copy of Appendix B). Also, there are two different pages labeled "Page 2 of 5" in Appendix B. The amendment to the claims has been entered to expedite prosecution, but applicant's next correspondence should show what changes, if any, were made to claims 1-6 and 30-33.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892 or initialed on a form PTO-1449, they have not been considered.

This refers to the foreign reference cited on page 3 of the specification.

Drawings

3. The drawings are objected to because of the following informalities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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- a. Reference numeral 30 (page 6, line 19 and throughout the specification) does not refer to a piston.
- b. Reference numerals 156 and 122 (page 13, lines 1-2) are not on the drawings.
- c. Comparing page 13, line 10 to the drawings, "58" on page 13, line 10 should be "158".
- d. Comparing the specification to the drawings "Figure 8" on page 13, line 12 should be "Figure 9".
- e. On page 13, line 27 "130" should apparently be "120".

Specification

4. The disclosure is objected to because of the following informalities:
 - a. On page 7, line 13 "en" should be "end".
 - b. On page 9, line 23 "axles" should be "axle".
 - c. On page 9, last line "tightened. The" should be "tightened, the" to form a complete sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 1, lines 7-9 there is no antecedent basis for "the trailing arm".

Furthermore, this is apparently a double inclusion of the spring beam already recited in the claim.

b. The same occurs in claim 19.

c. In claims 4 and 21, "laterally" should be "longitudinally" (the flanges extend longitudinally of the vehicle).

d. It is inaccurate in claims 18 and 31 to recite the S-cam bearing as on the spring beam (it is on the bracket bearing the spring at the rear).

e. In the last line of claim 6, "relative spring beam" should apparently be "relative to the spring beam".

f. In claims 13 and 28, last line "ordinary" is not clear (what defines ordinary conditions).

g. In claim 25 there should not be a space before the period.

h. In claims 14 and 29, line 2, "another portion" is recited, but there is no recitation previously in the claims of a first portion (i.e., "a portion").

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3 and 12 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by VanDenberg.

VanDenberg discloses a suspension with a pair of trailing arms 15 (Figure 3) adapted to mount on spaced frame rails 7 as broadly recited, each trailing arm assembly including frame bracket 5 on a frame rail and spring beam 15 (see the abstract, where the trailing arms or beams flex) pivotally mounted on the frame at one end and a spring 24 spaced from the end. An opening or axle seat is integrally formed in the beam (claim 1). The opening is cylindrical and adapted to slidably receive the axle (claims 2-3). Regarding claim 12, in the abstract VanDenberg teaches an adhesive between the axle and seat, which adhesive would be a layer when applied.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 13-14 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over cl1.

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Although VanDenberg does not teach the opening in the beam for the axle being smaller than the axle, press or interference fitting (i.e. forming an opening to receive a member slightly smaller than the member to be received) is old and well known in the vehicle art, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanDenberg to include an axle that is interference fit into the opening in the beams in order to hold the axle in a desired position automatically as it is fit into the beam. As functionally recited in claim 14, interference fitting involves bending another portion of the beam as functionally and indefinitely recited (bending the beam to open the opening wider).

11. Claims 15-16, 19-20 and 27-29 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDenberg in view of British Patent 1,203,386.

VanDenberg discloses all the limitations of claims 15-16 and 19 (including cylindrical openings at the bracket end for bolts) except the axle seat centerline outboard of the pivot axis centerline. British '386 discloses the axle seat centerline on the leaf spring outboard of the pivot axis centerline (solid pivot axis centerline in Figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanDenberg to include the axle seat centerline outboard of the pivot axis centerline as taught by British '386 in order to take up side thrusts and improve self steering characteristics (British '386, page 1, lines 55-65) (claim 19). Regarding claims 20 and 27, VanDenberg, the primary reference, teaches an integral cylindrical portion as the axle seat in the beam as well as an adhesive layer between the axle and seat for bonding (abstract). Regarding claims 28-29, as noted above interference fitting is old and well known and involves bending, resulting in even distribution of compressive load and in the

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combination VanDenberg's adhesive layer would prevent movement under ordinary conditions as best understood.

12. Claims 17-18 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDenberg in view of Dilling et al (cited by applicant).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanDenberg to include the brake actuators shown in phantom mounted on the beam in view of Dilling et al's actuator mounted on the beam in Figure 10 in order to reduce stresses on the axle (Dilling et al, column 5, lines 35-40). In view of the indefinite recitation of claim 18, the combination meets the positive limitations of the claim.

13. Claims 30-34 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over VanDenberg in view of British '386 as applied to claim 29 above, and further in view of Dilling et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanDenberg and British '386 to include the brake actuators shown in phantom mounted on the beam in view of Dilling et al's actuator mounted on the beam in Figure 10 in order to reduce stresses on the axle (Dilling et al, column 5, lines 35-40). In view of the indefinite recitation of claim 31, the combination meets the positive limitations of the claim. VanDenberg's spring beam 15 has a cylindrical transverse bolt opening for pivotally mounting the beam (claims 32-33).

Allowable Subject Matter

14. Claims 4-11 and 21-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703/746-3508 for regular communications and 703/308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Eric D Culbreth
Primary Examiner
Art Unit 3616

Eric Culbreth
6/02/03

ec
June 2, 2003